Neutrophil Oxidative Burst Assay (DHR)

ARUP LABORATORIES

Patient: [redacted]
DOB: [redacted] Age: [redacted] Sex: [redacted]
Patient Identifiers: [redacted]

Visit Number (FIN): [redacted]

Client: [redacted]

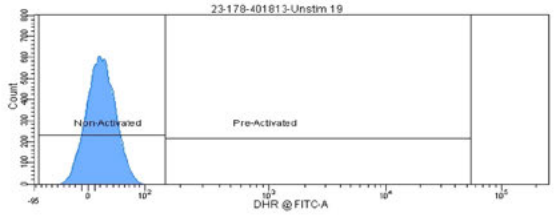
Physician: [redacted]

ARUP Test Code: 0096657

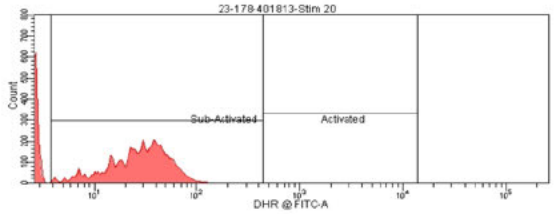
Collection Date: 06/26/2023
Received in lab: 06/27/2023
Completion Date: 06/29/2023

Patient: [redacted] **Sex:** [redacted] **Age:** [redacted]

Patient Sample



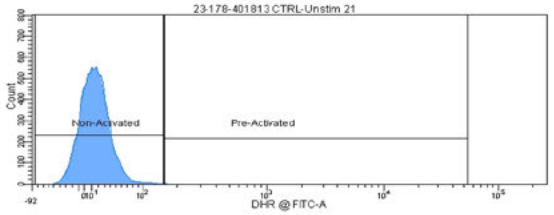
Populations	#Events	Population %	DHR PE-A Geo Mean
All Events	181170		6
Granulocytes - HBSS	10665	5.9	18
Non-Activated	10662	**100**	**18**
Pre-Activated	3	0	218



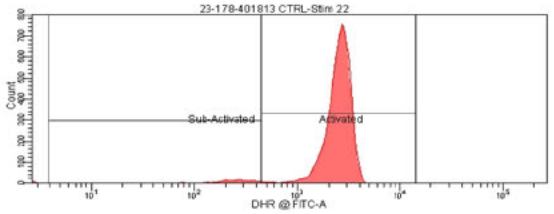
Populations	#Events	Population %	DHR PE-A Geo Mean
All Events	142857		7
Granulocytes - PMA	8145	5.7	23
Activated	0	**0**	
Sub-Activated	6521	80.1	29

Activated Granulocyte Fluorescence Stimulation Index:
Sub-Activated Granulocyte Fluorescence Stimulation Index: 2

Client-Submitted Control



Populations	#Events	Population %	DHR PE-A Geo Mean
All Events	39958		5
Granulocytes - HBSS	9894	24.8	13
Non-Activated	9730	**98.3**	**12**
Pre-Activated	168	1.7	357



Populations	#Events	Population %	DHR PE-A Geo Mean
All Events	57481		33
Granulocytes - PMA	10019	17.4	2524
Activated	9449	**94.3**	**2570**
Sub-Activated	539	5.4	202

Activated Granulocyte Fluorescence Stimulation Index: 214
Sub-Activated Granulocyte Fluorescence Stimulation Index: 17

Private Information

Interpretation:

No detectable increase in stimulated granulocyte dihydrorhodamine fluorescence, suggests chronic granulomatous disease or, less commonly, autosomal recessive chronic granulomatous disease. Suggest performing Neutrophil Oxidative Burst Assay on mother to distinguish between X-linked and autosomal recessive CGD. Recommend repeat testing or molecular testing on patient for confirmation.

[redacted]
6/27/23

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Jonathan R. Genzen, MD, PhD, Laboratory Director

Chart continues on following page(s)

Patient: [redacted] | **Date of Birth:** [redacted] | **Sex:** [redacted] | **Physician:** [redacted]
Patient Identifiers: [redacted] | **Visit Number (FIN):** [redacted]

Interpretive Information

INTERPRETIVE INFORMATION: Neutrophil Oxidative Burst Assay

White blood cells are incubated with dihydrorhodamine 123 (DHR) and catalase then stimulated with Phorbol 12-Myristate 13-Acetate (PMA). Dihydrorhodamine oxidation to rhodamine by the respiratory burst of the cell is measured by flow cytometry.

Results are reported as the ratio of the mean channel fluorescence of stimulated cells versus unstimulated cells, which yields a stimulation index (SI).

This test requires the submission of a client control sample to determine whether abnormal results observed in the patient sample are due to artifacts of specimen collection, transport, and/or handling, or patient condition. Abnormal patient results in the absence of a client submitted control sample should be correlated clinically and interpreted with caution.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

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